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Acute Coronary Syndromes

PHARMACODYNAMIC EFFICACY OF PRASUGREL MAINTENANCE THERAPY AT IN-HOSPITAL AND ONE-MONTH TIME POINTS: COMPARISON BETWEEN ST-ELEVATION MYOCARDIAL INFARCTION AND NON-ST-ELEVATION ACUTE CORONARY SYNDROME

Poster Contributions
Poster Hall B1
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Session Title: ACS: Procedural and Long-Term Antithrombotic Therapy
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Background: Because STEMI represents platelets being greatly activated, potent $P2Y_{12}$ inhibitor together with primary PCI is considered crucial to achieve an optimal reperfusion status. This analysis was performed to evaluate pharmacodynamic efficacy of prasugrel therapy at in-hospital and one-month time points between STEMI vs. NSTE-ACS patients.

Methods: After prasugrel 60 mg loading followed by 10 mg/d, PCI-treated ACS patients (n = 250) were randomized to prasugrel 10 mg/d (n = 98) or 5 mg/d (n = 152) according to the study protocol. Platelet reactivity was assessed by VerifyNow before randomization and at 1-month follow-up.

Results: $PRU_{in\text{-}hospital}$ in STEMI (n = 100) was not different compared with that of NSTE-ACS (n = 150). Most of patients overcame the risk of HPR in the STEMI (3.0%) as well as NSTE-ACS (6.0%) groups (p = 0.372). At 1-month follow-up, STEMI showed similar level of $PRU_{1\text{-}month}$ as compared to NSTE-ACS receiving 10 mg or 5 mg prasugrel therapy. HPR risk was rarely observed during 10 mg/d or 5 mg/d prasugrel therapy (1.0% and 10.5%); STEMI and NSTE-ACS patients showed the similar prevalence of HPR (p values ≥ 0.626).

Conclusion: In PCI-treated patients, STEMI is not associated with the increased level of platelet reactivity and prevalence of HPR during prasugrel therapy. The present result suggests that platelet reactivity alone may not explain whole aspects of highly pro-thrombotic state and observed benefit of potent $P2Y_{12}$ inhibitors in STEMI patients.